What is claimed as new and desired to be protected by Letters

Patent of the United States is:

1. A method for deploying a fiber optic communication network comprising:

storing an attribute of an optical communication component in a catalog database entry;

associating said catalog database entry with a design profile;
selecting said database entry from said design profile;
reading said attribute from said database entry; and
associating said attribute with a planned deployment of a physical instance of said component.

- 2. A method as defined in claim 1, further comprising iterating said
  15 associating step a plurality of times, and further associating said attribute
  of a component of a first iteration with said attribute of a component of a second iteration.
- 3. A method as defined in claim 1, further comprising recording said20 association in a computer memory.

- 4. A method as defined in the claim 1, further comprising physically deploying said physical instance of said component.
- 5. A method as defined in claim 1 further comprising identifying a geographic location for said planned deployment.
  - 6. A method as defined in claim 5 further comprising providing a graphical representation of said geographic location and said physical instance .

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- 7. A method as defined in claim 5 wherein said optical communication component comprises a component selected from the group of an optical cable, an optical cable connector, a splitter, an optical amplifier, an optical repeater, an optical transmitter, an optical splice enclosure, a patch panel, and a splice tray.
- 8. A method as defined in claim 1 wherein said optical communication component comprises an optical cable, said optical cable comprising a cable selected from the group of ribbon cable, loose tube buffer cable, central tube cable, odd count fiber cable, single mode fiber cable, multimode fiber cable, and cable including a plurality of fiber types.

- 9. A method as defined in claim 8 wherein said optical cable includes a plurality of optical fibers said plurality comprising a number of fibers between about one fiber and about 2600 fibers.
- 5 10. A method as defined in claim 1 wherein said planned deployment includes identification of said instance with an owner.
  - 11. A method as defined in claim 1 wherein said planned deployment includes identification of said instance with a communication circuit.

12. A method as defined in claim 1 wherein said planned deployment includes deploying a plurality of optical communication components

- 13. A system for planning a network comprising:
- a first computer including a first memory storage device having application software encoded therein;

a second computer, operatively connected to said first computer, having a second memory storage device adapted to record first project data;

a third computer, operatively connected to said second computer, having a third memory storage device adapted to record second project

data, said first and second project data being substantially instantaneously identical;

said software including a catalog portion, a design profile portion, and a calculations portion;

said catalog portion being adapted to receive data defining a plurality of communication network components;

said design profile portion adapted to receive data defining a plurality of design rules related to logical design of a network; and

said first data including a logical model of a communications

10 network;

said calculations portion being adapted to calculate power and signal relationships within said communications network.

- 14. A system as defined in claim 13, wherein said communicationsnetwork comprises an optical fiber portion.
  - 15. A system as defined in claim 14, wherein said optical fiber portion comprises an optical cable having a buffer with first and second optical fibers;
- said optical fibers having different nominal characteristics.

- 16. A system as defined in claim 13, wherein said communications network comprises a wireless communication portion.
- 17. A system as defined in claim 13, wherein said software further
  5 comprises a detail notes portion adapted to record detailed layout of a network within a multiple dwelling unit.
- 18. A system for planning a network comprising:
  a computer including a memory storage device having application
  software encoded therein;

said software including a catalog portion, a design profile portion, a project storage portion, and a calculations portion;

said catalog portion adapted to receive data defining a plurality of communication network components;

said design profile portion adapted to receive data defining a plurality of design rules related to logical design of a network;

said project storage portion adapted to receive data including a logical model of a communications network;

said calculations portion adapted to calculate power and signal relationships within said communications network;

said communications network including an optical fiber portion.

and

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19. A system for planning a network comprising:
a computer including a memory storage device having application software encoded therein;

said software including a catalog portion, a design profile portion,

a project storage portion, and a calculations portion;

said catalog portion adapted to receive data defining a plurality of communication network components;

said design profile portion adapted to receive data defining a plurality of design rules related to logical design of a network;

said project storage portion adapted to receive data including a logical model of a communications network;

said calculations portion adapted to calculate power and signal relationships within said communications network;

said communications network including an optical fiber portion;

one of said communication network components including an optical cable having a buffer with first and second optical fibers, said optical fibers having different nominal characteristics.

20 20. A system for planning a network comprising:

a computer including a memory storage device having application software encoded therein;

said software including a catalog portion, a design profile portion, a project storage portion, and a calculations portion;

said catalog portion adapted to receive data defining a plurality of communication network components;

said design profile portion adapted to receive data defining a plurality of design rules related to logical design of a network;

said project storage portion adapted to receive data including a logical model of a communications network;

said calculations portion adapted to calculate power and signal relationships within said communications network;

said communications network including a wireless communication portion; and

one of said communication network components including an antenna adapted to radiate radio frequency signals.

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21. A method of deploying a communications network comprising:

providing first and second computers including first and second memory storage devices respectively, each having application software encoded therewithin;

operatively connecting said first and second computers through a communications link;

including a logical model of a communications network within said first storage device, said model including first and second logical communication cables, said model depicting operative connection of said first and second cables;

receiving said logical model through said link into said second computer memory device;

representing said logical model graphically; and operatively connecting first and a second physical communication cables according to said model.

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- 22. A method as defined in claim 21 further comprising the step of transmitting a notice of completion of said operative connection of physical cables through said link into said first computer.
- 23. A method as defined in claim 21 further comprising the step of modifying said graphically represented logical model;

transmitting said modified logical model to said first computer and subsequently receiving authorization for said operatively connecting first and second physical communication cables.

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24. A method as defined in claim 21, wherein said method further comprises:

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characterizing the signal strength of a radio frequency signal as a function of geographic location; and

using said characterization to locate a radio frequency antenna.

25. A method of deploying a communications network comprising: 5

providing first and second computers including first and second memory storage devices respectively, each having application software encoded therewithin, said second computer being a portable computer;

operatively connecting said first and second computers through a communications link;

including a logical model of a communications network within said first storage device, said model including first and second logical communication cables, said model depicting operative connection of said first and second cables;

receiving said logical model through said link into said second computer memory device;

representing said logical model graphically; and operatively connecting first and second physical communication cables according to said model.

26. A method as defined in claim 25 wherein said portable computer comprises a laptop computer.

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## 27. A method of modeling a fiber optic communication network comprising:

5 defining a land base map;

defining a first plurality of optical network components including a second plurality of optical cable segments;

associating each component of said first plurality with a location of said land base;

associating each component of said first plurality with at least one other component of said first plurality;

calculating signal loss through at least one segment of said second plurality; and

displaying said land base map and said signal loss calculation result.